Index

9/11 attacks
estimated losses 160
terrorism cover availability,
influences on 22
Abbring, J. 503
Abraham, K. 378, 488, 508–9
Abrahamse, A. 513
adverse selection 310
Affordable Care Act reforms, and
225, 318
classification risk, and 308, 310–16, 342
credit scoring 342–3
health insurance, and 204
insurance premiums 24
liability insurance 510–11
market failures 342–3
pain and suffering compensation 110–11
social insurance, and 135
underwriting responses to 343
Aetna 350–51
Affordable Care Act (2010) 5–6
adverse selection, and 225, 318
age-rating restrictions 212
altruism, and 198–9
background 190
benefits of reforms, evidence of 221–3
benefits requirements 211–12
challenges and limitations 15, 26–7, 229–30
classification risk, and 317–18
consumer motivation 26
cost projections 217–21
cost-saving mechanisms 219–20
cost-sharing subsidies 207–8, 226–7
coverage expansion 207–10, 216–17, 226–7
coverage tiers 211–12
employee benefits, provision implications 227–9
employer mandate 209, 225
enrollment mandate 212
enrollment trends 223–4
Federal healthcare spending 192–4, 217–21
grandfathered plans 213
health insurance exchanges 190, 210–11
individual mandate 190, 208–9, 312, 384–5
insurance market regulation 210–16
labor market implications 227–9
Massachusetts reforms, and 221–3
Medicaid expansion 207
minimum medical loss ratios 215
negative externalities, reduction of 199
penalties 209, 225
political challenges 190–91
pre-existing conditions, and 210, 213, 308
premium rate estimates 224–6
premium tax credits 207–8
principles 17–18, 190, 206, 306–7
rate review provisions 215–16
risk adjustment program 213–14
risk classification, and 205–6
risk corridor program 214–15
state vs. private insurer role 148
tax credits 209
transitional plans 213
transitional reinsurance program 214
uninsured, cover provision for 194–6, 199
AIDS/ HIV
adverse selection and market failure 342
classification risk, and 290–91, 295, 311
AIG 246, 280, 326, 357
Anagol, S. 51–2
Anderson v. Continental Insurance Co. 418, 424–5
annuities
  selective attrition 312
  under-purchase 29, 31
Appleton Rule 354–5
arbitration clauses 392–4
Arlen, J. 509–10
Arrow, K. 71–2, 135, 175, 345, 501
Asmat, D. 427, 431–2, 434
Assurance Co. of America v. Jay-Mar, Inc. 386
Atkinson, A. 128, 136
AT&T Mobility v. Concepcion 392
automobile insurance see motoring insurance
Avery v. State Farm 355
Avraham, K. 347, 431–2, 434
Ayres, I. 379–80, 399, 511
bad faith liability 368, 414
  breach of contract, and 417
  cause of action
    in contract law 419
    statutory basis 419–20
    in tort law 418–19, 429–30
  claims, limitations on 421–2
  competition and market forces 421–2
  concept development 416–18, 420, 434–5
  damages, restrictions on 419, 422–3
  dispute resolution, and 415–16, 426–9, 434
  duty to settle 413, 416–17
  economic justification 421–3
  extra-contractual damages 416, 422–3
  incentive effects on claims 423–4
  insurance claim fraud, and 424–6, 432–3
  intentional harm, and 418–19, 430
  judicial influences 429–30
  negligence standard 418
  risk aversion 427–8
  settlements, influences on 431
  standards of proof 432
  state law variations 432–3
  unfair trade practices laws 413, 415
Baker, T. 419, 435, 491, 503–4, 512–13
Ball, R. 135
‘bankruptcy curse’ 302
basil Committee on Banking
  Supervision 253
Becker, G. 422
Beck v. Farmers Insurance Exchange 419
behavioral economics
  consumer failures 16–17
  consumer motivation 16–18, 26
  default options 16–17
  income effects 81–4
  intuitive behavior 15, 18–22
  rational choice 26–7
  risk misperception, and 17
Bergstresser, D. 48
Berkshire Hathaway 282
Bernard, D. 197
Bhattacharya, U. 48, 199
bias
  availability bias 20
  distribution incentives 39–40
  evidence
    customer complaints 51–4
    external sources 47–50
    intermediary audits 50–52
    statistical comparisons 51, 54–6
    generally 38–40
  information asymmetries 36, 38–9
  in insurance advice, modeling 41–3
  regulatory constraints 56–63
  restricting 46–7
  risks of 36
  technological influences on 36, 63–6
Biggert-Waters Flood Insurance
  Reform Act (2012) 17, 360–61
Bluethgen, R. 48–9
Boardman, M. 404
Boyce, R. 324
Browne, M. 51, 55, 431
Brown, J. 51, 54, 135
Buchmueller, T. 228
Burton, J. 506
Calabresi, G. 99
Calfee, J. 509
California Earthquake Authority (CEA) 179
Canada
  bad faith liability 420
  capital adequacy see solvency regulation
Index

Carroll, S. 513
Carron, L. 504
catastrophe insurance
alternatives to traditional government programs 183–6
ambiguity aversion, and 169 asymmetric information, and 169 California Earthquake Authority (CEA) 179
capital costs 165–6
catastrophe bonds 167–9
Catastrophe Obligation Guarantee Act (proposed) 184 challenges 5, 186–7
claims adjustment 181
collateral debt obligations and credit default swaps (CDO/CDS) 172–3
comprehensive disaster insurance 185–6
definition 160
Federal reinsurance proposal 183–4
financial guarantee insurance 172–3
flood map accuracy 26
Florida Hurricane Catastrophe Fund (FHCF) 177–8
functions 161
government sponsored enterprises (GSEs) 172–86
importance 25
incentives 18
insolvency risk 5, 163–5
insurer of last resort, and 184–5
median tenure 20–21
mitigation incentives, and 161, 182–3
monoline coverage 5, 170–74
National Floor Insurance Program (NFIP) 17, 176–7
nuclear power accidents 367
policy sales and marketing 181
political influences 174–5
premium-loss ratios 165–6
premium setting 180–81
price discovery 161
private market vs. government plans 181–2
private mortgage insurance 171–3
regulator intuition 23
reinsurance 5, 166–7
restrictions and limitations 21
risk aversion, and 168–9
risk transfer 161, 163, 167–9
state role 5, 164–5, 174–86
state vs. federal regulation 360–61, 367
tax implications 165–6
Terrorism Risk Insurance Act (TRIA) 179–80
catastrophes
aggregate worldwide losses 160–63
burden of loss 160–61
Cebul, R. 203
Chalmers, J. 49–50
Chandler, S. 378
Chan, T. 54
Chernow, M. 90
classification risk
adverse selection, and 308, 310–16, 342
AIDS/ HIV 290–91, 295, 311
confidential testing, and 305–6
contract regulation 316–18
control and controllability 299–300
cream skimming 293–4, 313–14
credit scoring 342–3
‘death spiral,’ and 311–12
deductibles, restrictions on 316–17
definition 297
discrimination, and 290–93, 301, 306
diversification 291–2
equilibrium, definition 313–16
ethical considerations 299–300, 305
ex ante risk realization 297–8, 305–6
exclusivity, and 309–10
 genetic disease, and 294–5, 297–88, 305–6
health insurance, and 203–6, 290–91
Hirschleifer Effect 297–8
insurance incentives, and 298, 317
intrinsic classification risks 299–300
moral hazard, and 296, 307–8
mutualization principle, and 292
occurrence vs. reclassification risk 300
optimum contracts, and 303–4, 313–16
policy trends 302
pre-existing conditions, and 301, 304, 308
price differentiation, and 292–4, 307–8
price elasticity, and 294
reclassification risk, and 298–302
regulation vs. prohibition 304–7, 318–19
risk of classification as high risk 204–5, 291, 294–5
selective attrition, and 311–12
self-selection contract mechanisms and 313–17
switching costs 294
triggers for long-tail liabilities 302
climate change 24
Coase, R. 426
Cochrane, J. 205, 302, 304
Cogan, J. 221
Cohen, A. 501–2, 510
coinsurance rate 72
health insurance, and 83–5, 90
commission
advice bias, influences on 44–7
contingent commission 46
Common Framework for the Supervision of Internationally Active Insurance Groups (ComFrame) 271–3, 285
competition
barriers to entry 349–51
competitive market, definition 334
economies of scale, and 348–9
insurance intermediaries, and 45–6
market regulation, and 334–5
optimum contracts 303–4, 313–16
perfect competition 242–3
price differentiation, and 293–4
state vs. federal regulation 348–53
unequal bargaining power 351–2
unfair prices 352
complaint-allegation rule 387

Conflicts of Interest
disclosure duties 59
Consorcio de Compensación de Seguros (CCS) 185–6

Consumer Motivation
130–31
certainty vs. financial loss 78–9
challenges 15
default options 16–17
deliberative thinking 19–20, 26–7
economic efficiency 17, 24–5, 32–3
health insurance 78
heuristic decision-making, and 17
higher premiums, and 16–17
ignorance, and 41–3
inducements 17–18
insurance over-purchase 30
intuition and emotion 15, 20–21
likelihood of risk, and 20–21
long-term policies 33
low-incomes, and 15, 20–21, 197–8
mandatory insurance, and 17
premiums, value perceptions 17, 20–21, 24–5, 33
rare events coverage 32–3
risk misperception, and 17, 109–10
variations of 37
contagion 335, 356–60
Continental Casualty Co. v. Reserve Insurance Co. 479

Contract Law
see also contract terms
common law of insurance 384
expectation damage principle 414
function 379
contract terms
default rules
definition 377
information-forcing/penalty defaults 380–81
majoritarian rules 380
purpose 379–81
sticky default rules 387–9
default rules vs. mandatory rules 377–8, 410–11
efficiency, relevance of 394, 398–9
externality argument, and 396–9
functions 379–80
influences on 394–5
insurance contracts, relevance to 400–401
intentional harm requirement 390–91, 396–7
literary evaluation 378–9
mandatory health insurance 395–6
mandatory motor insurance 395–6
moral hazard, and 397–8
quasi-mandatory rules 387–9
Index  527

regulatory approval of terms 405–8
regulatory rejection of terms 403–5
rules vs. standards 408–10
standard-form contracts, and 394–5, 399
sticky default rules 387–9

insurance contracts
court enforcement duties 405–6
differences from other contracts 393–4
regulatory independence, and 407–8
right to recoup defense and settlement costs 404–5
rules vs. standards 408–10
state regulation variations 402
terms, regulatory approval of 405–8
terms, regulatory rejection of 403–5

mandatory rules
alteration of 381
anti-coverage vs. pro-coverage terms 398
arbitration clauses 392–4
categories of 384
cause requirements 385–6
common law duties, and 386–9
contra proferentem rule 380–81, 390, 398–9, 404
definition 377
disproportionate forfeiture 391–2, 398
duty to defend and settle 387–9, 399–400
enforceability 390–92
expressly required terms 384–6
functions 381–2, 400
good faith 386–7
health insurance 384–5
insurable interest requirement 390–91, 396–7
intentional harm requirement 390–91, 396–7
judicial interpretation 389–92
multiple concurrent causes, and 385–6

occupational disability, and 386
product liability, and 381–3
quasi-mandatory rules 387–9
standard form contracts 383–4, 392–5, 399
court enforcement obligations 406–7
in insurance, role of 402–8
contra proferentem rule 351, 378, 380–81, 390, 398–9, 404
Cook, P. 106
Cooter, R. 444
corporate governance
international initiatives 277–8
OECD principles 277–8
Solvency II 276–7
Solvency Modernization Initiative 274–6
Courtemanche, C. 222
court proceedings
bad faith liability dispute resolution 415–16
contra proferentum rule 351, 378, 380–81, 390
insurance case trends 400–401
insurer duty to defend 387–8, 399–400
insurer duty to settle 388–9, 399–400
mandatory rules
arbitration clauses 392–4
case trends 400–401
disproportionate forfeiture 391–2
interpretation and enforcement 387–92
quasi-mandatory rules 387–9
purpose 379–80
state vs. federal insurance regulation role 361–2
credit scoring 342–3
Crisci v. Security Insurance Co. 417, 472
Crocker, K. 425
Croley, S. 107–8, 111, 510
Cummins, J. 45, 266–7
damages
bad faith liability 416, 422–3
extra-contractual damages 416, 422–3
optimal damages 422
Danzon, P. 111, 508, 512
‘death spiral’ 311–12
deductible aversion 30
default rules see contract terms
defense of covered claims
see also duty to defend; right to defend
costs
defense vs. settlement 448
management, importance of 447–8, 453
mitigation mechanisms 454–8
value-based fee arrangements 457–8
variability 447
counsel
as co-clients 454–5
in-house counsel 455
specialized 455–6
working arrangement and status 454–5
defense-related incentives 443–6
economics of 443–7, 458
excess coverage, and 450
insurance contract efficiency, and 444–5
judgment-proof defendants 443
judgment risk 443–4, 449
litigation management guidelines 456
optimal defense 444–5
reasonable care standard 446–7
transfer of liability, and 443–4, 450–51
deliberative thinking 19–20, 22, 26–7
eductible aversion 30
de Meza, D. 82
Diamond, P. 135
Dionne, G. 504
disclosure
breach of duty 413–14
discrimination
classification risk, and 290–93, 301, 306
dispute resolution
bad faith liability 415–16, 426–9, 434
court role 415–16
Dobzhansky, T. 488
Doherty, N. 45, 104–6
D&O insurance 466, 485, 503
due care, definition 493–4
duty to contribute 463, 475, 477–9
duty to defend 438–9
see also right to defend
activation of 440–42, 450–51
co-client status 446–7, 449, 454–5
common law rules 441–2, 445–7
complaint allegation rule 442
consent to settle clauses 452–3
costs management, and 447–8, 453
default vs. mandatory rule status 387–8, 399–400
defense-only policies 439–40
defense-related incentives 445–7
False Claims Act proceedings 439–40
indemnity limits 452–3
influences on 441
in-house counsel 455
insurer mitigation mechanisms 454–8
litigation management guidelines 456
pleading into coverage 442
policyholder responsibility for 447–8
policy types 441
purpose 441–2
reasonable care standard 446–7
shared control provisions 446–7, 449
specialized panel counsel 455–6
third-party payer conflicts 451–2
value-based fee arrangements 457–8
duty to indemnify 438–9
limitations 452–3
policy types 441
duty to settle 463–4, 469
bad faith liability, and 413, 416–17
collective action settlements 462, 464–6, 480, 482, 484–6
conflicts of interest 461–2
consent to settle clauses 452–3
default vs. mandatory rule status 388–9, 399–400
disregard-the-limits rule 462

duty to contribute 463, 475, 477–9
need for 464
Index 529

no-liability approach 477–8, 480
reasonable consent provision 479
reasonableness standard 462, 469–70, 472, 479, 482
segmented approach to 462–4, 481–5
settlement-duty scenarios 462–4
above-limit demand, post-judgment context 475–8
above-limit demand, post-settlement context 478–81
within-limit demand, post-judgment context 467–73
within-limit demand, post-settlement context 473–5
strict liability approach 462–4, 469–74, 476–80

Eckardt, M. 45, 52, 55–6

economic models
liability insurance, and 488–9, 492–9, 514

290–91, 308, 317

enterprise risk management (ERM) practices 266

errors and omissions insurance 58
Escola v. Coca Cola Bottling Co. 98–9
estoppel 61

European Insurance and Occupational Pensions Authority (EIOPA)
256–7, 268

European Union
insurance agent licensing 62
pain and suffering awards, inequities in 117
solvency regulation
capital requirements 268–71
corporate governance 276–7
Financial Conglomerates Directive 284
group supervision 283–4
Omnibus II Directive 253, 256
Solvency II 255–7, 268–71, 284
US reforms, differences from 284–6
exceptions 18
expected utility theory 106–10
externalities, influences of 362–3
financial contagion 335, 356–8
insurer contagion 358–60
large or catastrophic losses 360–61
market failure, and 335
solvency regulation 243–4
state vs. federal regulation, and 353–63
uncompensated accidents 353–4

False Claims Act proceedings 439–40
Federal Emergency Management Agency (FEMA) 17, 177
Federal insurance
mandatory insurance 26
federal control, benefits 329–331, 340–41, 364–367
suitability requirements 59–60
Federal Insurance Office (FIO) 244–5, 327
insurance regulation studies 327–8
Federal Reserve 246
Feinman, J. 420
Feldman, H. 104
Feldstein, M. 74, 90
Financial Conglomerates Directive 284
financial crisis
aggregate losses 160
federal insurance regulation, and 326–7
financial contagion, and 356–8
insurance, influences on 252–3
insurer contagion, and 359–60
liability underwriting cycle, and 512–13
Troubled Asset Recovery Program (TARP) 357–8
financial services ombudsman 415
Financial Stability Oversight Council (FSOC) 246
fire insurance
US historical development 323
first-party insurance bad faith see bad faith liability
fiscal federalism
economic theory of 321, 328–34
fraud, and 346–7
Fitzpatrick, S. 512
Florida
disaster insurance insolvency risk 23, 32, 177
federal insurance programs 360–61
hurricane insurance trends 23, 177–8
judicial interpretation of insurance
contract terms 361–2
Florida Hurricane Catastrophe Fund
(FHCF) 177–8
Focht, U. 44
Fortin, B. 506
Frankenmuth Mutual Insurance Co. v.
Keeley 471
fraud
bad faith liability claims 424–6,
432–3
liability insurance, trends in 504–5
state vs. federal role in tackling
346–7
Freeman, J. 79
Friedman, M. 82
functional magnetic resonance imaging
(fMRI) 116
Gallanis, P. 344–5
GDP
life/non-life insurance, percentage
trends 249–53
social insurance, proportion as 4,
127
Geistfield, M. 511
gender
discrimination vs. price
differentiation 307–8
life expectancy 312
market adverse selection 312
General Accident, Fire & Life Assurance
Corp. v. Louisville Home Telephone
Co. 484
genetic disease
classification vs. reclassification risk
298–9
ex ante risk realization 298–9,
305–6
risk of classification as high risk
294–5
Genetic Information
Nondiscrimination Act 306
Germany
insurance agent licensing 62
Görtner, R. 380
globalization
insurance industry, implications of
252–3
Goldberg, J. 102
good faith 351, 386–7
see also bad faith liability
duty to settle 413
interpretation 413–14
Grace, M. 345, 359–60, 364
Graetz, M. 128, 134–7
Graham, D. 106
Gramm, Leach, Bliley Act (1999)
325–6
Gravelle, H. 44
Griffith, S. 491, 503
Gruber, J. 197, 208, 222
Gruenberg v. Aetna Insurance Co.
417–18
Guo, X. 506
Hackethal, A. 48
Hackmann, M. 222
Hadley, J. 199
Hadley v. Baxendale 380
Handel, B. 318
Hangartner v. Provident Life and Acc.
Ins. Co. 386
Hanson, J. 107–8, 111, 510
Harrington, S. 352, 508, 512
Harris, M. 303
Hartwig, R. 160
healthcare reform
see also Affordable Care Act (2010)
Massachusetts reforms (2006) 221–3
health insurance
see also Affordable Care Act; social
insurance
administrative costs 201–2
adverse selection, and 204, 225, 318
affordability 26–7
asymmetric information, and 204
behavior, influences on 198–9
catastrophic coverage 22–3
challenges and limitations 5–6, 26–7,
317
classification risk, and 203–6,
290–91
coinsurance rates 83–5, 90
confidential testing, and 305–6
consumer motivation 26, 78–9, 84–9
cost growth drivers 193
cost-sharing 77–8, 81, 91
coverage caps 21
demand theory 82–3
desirability 71–2
discrimination, and 290–91, 301
employer-employee commitments
302–3
expenditure distribution 85
genetic testing, and 305–6
incentive misalignment in 193–4
income effect 82–9
insurer profit margins 200–201
job lock 204–5
lifetime perspectives 139–45
loss ratios 200–201
mandatory terms 384–5, 395–6
market performance 200–206
minimum wealth guaranty 197
moral hazard, and 71–80, 84–91,
193–4
net costs 200–202
policy influences 76–8, 89–91
portability 303–4, 306
potential health gains 79
pre-existing conditions, and 210,
301, 304, 308
purpose 85
RAND Health Insurance
Experiment 74–6, 80–81, 198
reclassification risk, and 302–3
renewal guarantees, and 205, 301–2
rescission of coverage 206
risk rating 203–6
safety-net programs, and 197
solution vs. problem 77, 90
state intervention, and 28–9
taxation vs. subsidy 90–91
transaction costs 85–6
uninsurance
reasons for 197–8
trends 194–6
Health Insurance Portability and
Accountability Act 303–4, 306
Heimer, C. 499
Herring, B. 205
Hersch, J. 513
Hirschleifer, J. 297–8
Hoffmann, A. 44
Holmstrom, B. 303
Hyman, D. 449
Ibragimov, R. 170
income effects 81–6
consumer surplus 84
health insurance, and 82–9
indemnification principle 345
indemnity, principle of 309
information asymmetries
bias 36, 38–9
catastrophe insurance, and 169
health insurance, and 204
mandatory terms 382–3
In Re: Silica Products Liability
Litigation 504
insolvency
see also solvency regulation
catastrophe insurance, and 5, 163–5
insurance company insolvency
trends 258–9
mutual insurance, and 32–3
warranties, protection of 31
insurance companies
failure
causes of 260–61
contagion 358–60
trends 258–9
licenses to practice 350–51
right to recoup defense and
settlement costs 404
insurance contracts
court enforcement obligations 405–6
differences from other contracts
393–4
mandatory vs. default terms 402–10
regulatory influences
approval of terms 405–8
regulatory independence, and
407–8
rejection of terms 403–5
state variations 402
rules vs. standards 408–10
Insurance Core Principles (IAIS) 257
insurance, generally
adverse selection, and 310
‘death spiral’ 311–12
discrimination 290–93
duplicate recovery restrictions
309–10
exclusivity, principle of 309–11
financial crisis influences 252–3
functions 129–30, 488
GDP percentage of 249–53
globalization, and 252–3
indemnity, principle of 309
insurance company failure, causes of 258–61
integration with financial markets 251–2
price differentiation vs. price discrimination 292–3, 307–8
private insurance vs. social insurance 129–31
selective attrition 311–12
insurance intermediaries
additional services 38
advice quality, influences on 44–7
benefits for consumers 37–9
bias 47
evidence, customer complaints 51–4
evidence, external sources 47–50
evidence, intermediary audits 50–52
evidence, statistical comparisons 51, 54–6
generally 38–40
modeling 41–3
regulatory constraints 56–63
restricting 46–7
compensation arrangements 2–3, 40, 44–7
competition, and 45–6
distribution system incentives, and 39–40
motivation 41–3
regulation 40
conflicts of interest disclosure 59
duties to policyholders 57–9
estoppel 61
licensing 61–3
suitability requirements 59–60
unfair trade restrictions 61–3
role of 2–3, 37–9
technological challenges for 36, 63–6
underwriting, influences on 38–9
Insurance Marketplace Standards Association 346
insurance theory
economic efficiency, and 17, 24–5, 32–3
general principles 16–17
purpose of insurance 24–5
insurer liabilities
duties to policyholders
duty to defend 387–8, 399–400
duty to settle 388–9, 399–400
generally 57–9
special relationship 57
International Association of Insurance Supervisors (IAIS)
capital requirements 271–3
ComFrame initiative 271–3, 285
corporate governance initiatives 278
group supervision 285
importance and influences of 253–4
Insurance Core Principles 257, 278
relevant entities, definition 285
solvency regulation initiatives 257–8, 271–3
intuition 18–23
availability bias 20
consumer behavior 15, 20–21
deliberative thinking, and 19–20, 22
insurer behavior 15, 21–3
likelihood of risk, and 20–21
regulator behavior 23
Jaffee, D. 160, 165, 174, 187
Kahneman, D. 78, 109
Kaufman, G. 356
Kimball, S. 324
Kleffner, A. 46
Knutsen, E. 378
Kolstad, J. 221–2
Kowalski, A. 221–2
Kramer, M. 48–9
Lanoie, P. 506
Latin, H. 109
Leverty, J. 366
Levitt, S. 49–50
Levy, H. 198
Lex, C. 62
liability insurance
absent insurance 507
adverse selection 510–11
asymmetric information, and 510–11
corporate motivations 491–2
data, uses for 513
Index

economic theory of 488–9
financial crisis, and 512–13
first-party insurance vs. tort liability 98–9, 489, 508–11
fraud 504–5
history of 489–90
individual motivations 490–91
injurer incentives 491–2, 496–9
judgment proof conflicts 507–8
minimum thresholds 507
models of 514
with insurance 494–9
without insurance 492–4
moral hazard, and 488–9, 499–500, 514
contract design 499–504
coverage design 501
experience-rating 501
ex post auditing 502
ex post moral hazard 502–6
external control measures 502–3
loss control 502
underwriting 501
welfare costs 505
Workers’ Compensation
Insurance, and 506
negligence, and 492–9
non-independent risk 508
purpose 488–9
risk aversion, and 494–9
socio-legal risk, and 508
strict liability, and 492–7
underwriting cycle 512–13
uninsured motorist insurance 507–8
victim incentives 491–2, 496–9
vs. workers’ compensation 489, 506
licensing
as barrier to market entry 350–51
insurance intermediaries 61–3
state vs. federal regulation, and 366–7
Liddy, E. 175
Lieberthal, R. 205
Liebman, L. 508–9
life insurance
state vs. federal regulation role 365
underprotection trends 29–30
life-time benefits
caps 21
social insurance perspectives 139–45
Long, S. 221–2
low-incomes
insurance affordability, and 25–7
insurance motivation, and 15, 20–21, 197–8
insurance vouchers 23
state healthcare and Medicaid
eligibility 228–9
state intervention, and 28–9
McCarran-Ferguson Act (1945) 324, 384, 393–4
McGann V. H&H Music Company 290–91
MacLeod, W. 510
Mahoney, N. 197–8
Maletic, V. 116
mandatory rules see contract terms
Manning, W. 80, 90
market failures
adverse selection 342–3
causes and responses 336–41
externalities and contagion 335, 356–60
fraud, and 346–7
informational market failures 341–8
moral hazard, and 344–5
price variability and switching costs 343–4
private mitigation factors 334
regulation, prevention role 334–5
solvency regulation, and 242–3
market power 353
barriers to entry or exit 349–51
economies of scale, and 348–9
state vs. federal regulatory role 348–53
unequal bargaining power, and 351–2
unfair prices, and 352
Marquis, S. 80, 90
Marshall, J. 82
Mashaw, J. 128, 134–7
maximin principle 108
Mayers, D. 491
Medicaid 149–51, 155, 196–7, 207, 228–9
medical malpractice insurance 466, 513

Daniel Schwarz and Peter Siegelman - 9781782547143
Downloaded from Elgar Online at 08/16/2019 02:50:54AM
via free access
Medicare 4, 150
see also health insurance; social insurance
  compulsory features 131–2
  costs 200–202, 219–21
  lifetime perspectives 139–45
  purpose 135
  subsidies 132
  underwriting constraints 132
Meier, K. 247
Meltzer, D. 198
Metro North Commuter Railroad v. Buckley 508
Michigan rule 471, 476
Mierzwa v. Florida Windstorm Underwriting Association 361
Miller, S. 222
Minor, D. 51, 54
misrepresentation 409
Miyazaki, H. 314–16
moral hazard
  classification risk, and 296, 307–8
  consumer surplus 84
  cost-sharing, and 77–8, 81, 91
  default rules vs. mandatory rules 397–8
  definition 71–2, 488–9
  ex ante 499, 501, 505
  ex post 99, 501–2, 504–6
  health insurance, and 71–80, 84–91, 193–4
  income effect 81–6
  inefficiency 73–4, 76–8, 89–91
  liability insurance, and 488–90, 499–500, 514
  contract design 499–504
  coverage design 501
  experience-rating 501
  ex post 502–6
  external control measures 502–3
  loss control 502
  underwriting 501
  welfare costs 505
Workers’ Compensation
  Insurance, and 506
  over-insurance, and 76–7, 89–90
  state role vs. federal role 344–6
  theory challenges and conflicts 78–81
health insurance, and 71–80, 84–91
  policy influences 76–8, 89–91
  principles 71–6
  transaction costs 85–6
  welfare implications 86–9
mortgage insurance 171–2
motoring insurance
  bad faith liability, and 431
  classification risk, and 307–8
  gender differentiation 307–8
  judgment proof conflicts 507–8
  lifetime perspectives 139–40
  mandatory insurance 147–8, 395–6
  price differentiation 293–4, 307–8
  social insurance, and 147–8
  uncompensated accidents 353–4
  uninsured motorist insurance 111, 147–8
Mullainathan, S. 48–9
multi-year policies 25–7
Minera, J. 51
mutual insurance 32–3
National Association of Insurance Commissioners (NAIC)
  Capital Adequacy Task Force 266–7
  corporate governance 274–6
  Financial Analysis Working Group (FAWG) 279
  financial guarantee insurance 172–3
  good faith and unfair trade practices 413
  group supervision initiatives 279
  mortgage insurance 171–2
  Own Risk and Solvency Assessment (ORSA) 275–6
  regulation harmonization initiatives 329–31
  Risk Based Capital Model Law 329, 331
  risk-based capital standards 262–8
  Solvency Modernization Initiative 253–5, 266–7, 274–6
  state law comparisons 331
  US Insurance Financial Solvency Regulatory Monitoring Requirements 279
National Flood Insurance Program (NFIP) 17, 176–7
National Flood Reform Act 15
National Insurance Act (2007) 326
natural monopolies 348
negligence
bad faith liability 418
due care, definition 493–4
vs. strict liability 492–9
Nell, M. 44
neuroscience
pain and suffering, analysis of 115–16
Newhouse, J. 74–6, 80–83, 86
non-monetary loss
see also pain and suffering
compensation demand, evidence of 108–12
expected utility theory, and 106–10
marginal utility of wealth 99–104
tort law efficiency, and 94–5, 104–5
vs. monetary loss
identification challenges 103–6
independence and
interdependence 106–7
irreplaceable commodities 106
well-being, and 104–5
Oates, W. 321, 328–34
Obamacare see Affordable Care Act
Office of Thrift Supervision (OTS) 246
old age insurance
lifetime perspectives 139–45
Omnibus II Directive 253, 256
optimal administration theory 321
optimal insurance 96, 344–5
Organisation for Economic Cooperation and Development (OECD)
corporate governance principles 277–8
overpayment hazard 461–2, 468–70, 472–7, 479
over-purchase, of insurance
consumer protection 31
moral hazard, and 76–7, 89–90
motivations 30
restrictions on 309–10
trends 38
Own Risk and Solvency Assessment (ORSA) 275–7
pain and suffering
compensation
administration costs 114–17
adverse selection 110–11
benefits 95, 114
caps 94–5
costs of 94–5, 112–17
estimation 114–19
first-party insurance for 98–112
inequity in 117–18
justification for 114–15
malingering, and 116–17
perception of pain, and 115
policy objections 96–119
seriousness of injury, and 115
social norms, and 111–12
supply and demand 108–12, 510
third party products 95
tort law, and consumer demand 98–112
tort law, burden on 112–13
tort law over-deterrence, and 96–8
value received 113
insurance theory, generally 94–5, 102
monetary vs. non-monetary loss
expected utility theory 106–10
identification challenges 103–6
independence and
interdependence 106–7
marginal utility of wealth 99–104
neuroscience developments, and 115–16
post-traumatic stress disorder 115–16
proof, difficulties with 96–7, 118–19
tort law reform trends 94–5
Parente, S. 226
Paul v. Virginia 322–3
Pauly, M. 71–6, 79–80, 198, 205, 222–3, 226
Pelzman, S. 247
Philadelphia Contributionship 322
Phillips, R. 266–7, 345, 359–60, 364
policy bundling 30–31
policy renewal guarantees 26, 205, 301–2
Polinsky, M. 113
post-traumatic stress disorder 115–16
Pottier, S. 344, 350, 352, 354–5, 365
PPG Industries v. Transamerica Ins. Co. 469
premiums
adverse selection, and 24
climate change, influences on 24
consumer value perceptions 17, 20–21, 24–5, 33
from foreign/out-of-state insurers 329–30
genetic disposition, and 24
multi-year policies, and 25
political influences 25
proportion of income 86
rare events coverage 32–3
risk-based, functions of 24–5
Price Anderson Act (1957) 367
price differentiation
competition, and 293–4
discrimination, and 292–3, 307–8
Priest, G. 175, 511–12
Principles of the Law of Liability Insurance (ALI) 378, 388, 409
probabilities 32–3
product liability law 97–9
mandatory rules 381–3
regulation, state vs. federal 362
Prosser, W. 104
Quigley, J. 174
Rabin, R. 118
Ramlet, M. 226
RAND Health Insurance Experiment 74–6, 80–81, 198
Ranger Insurance Co. v. Travelers Indemnity Co. 477–8
rare events coverage
consumer motivation 33–4
mutual insurance 32–3
rational choice
expected utility theory 106–10
Rawls, J. 107–8, 152, 299
Regan, L. 46
regulation
see also insurance intermediaries;
solvency regulation
antitrust exemptions 323–5
competition, and 334–5
consumer protection, and 335
economic justification for 334–5
extraterritorial regulation 354–5
importance of 334–5
insurance contracts
rules vs. standards 408–10
state variations 402
terms, approval of 405–8
terms, rejection of 403–5
insurance intermediaries 40
conflicts of interest disclosure 59
duties to policyholders 57–9
estoppel 61
licensing 61–3
suitability requirements 59–60
unfair trade restrictions 61–3
insurer contagion, and 358–60
intuitive behavior 23
market contagion, and 335, 356–8
market failure 334–5
causes and responses 336–41
market power 348–53
self-regulatory mechanisms 346
state role vs. federal role 244–5, 321–2, 369–70
adverse selection, and 342–3
barriers to entry 349–51
claim settlement practices, and 368
commercial insurance 365–6
commodity products 365
contract term requirements, and 368
economies of scale 348–9
externalities, role of 353–63
extraterritorial regulation 354–5
federal control, benefits 329–31, 340–41, 364–7
financial contagion 335, 356–8
FIO influences on 327–8
fiscal federalism, theory of 328–34
fraud, and 346–7
historical development 322–8
insurer choice proposal 326
insurer contagion 358–60
international considerations 366–7
inter-state policy variations and limits 331–4
judicial rulings, and 361–2
large or catastrophic losses 360–61
market failure causes and responses 336–41
<table>
<thead>
<tr>
<th>Index</th>
<th>537</th>
</tr>
</thead>
<tbody>
<tr>
<td>market power</td>
<td>348–53</td>
</tr>
<tr>
<td>moral hazard, and</td>
<td>343–6</td>
</tr>
<tr>
<td>price regulation, and</td>
<td>369</td>
</tr>
<tr>
<td>price variability and switching costs</td>
<td>344–4</td>
</tr>
<tr>
<td>solvency and resolution activities</td>
<td>364</td>
</tr>
<tr>
<td>state control, benefits</td>
<td>331–4, 340–41, 367–9</td>
</tr>
<tr>
<td>theoretical rationales for 335–40</td>
<td></td>
</tr>
<tr>
<td>uncompensated accidents</td>
<td>353–4</td>
</tr>
<tr>
<td>unequal bargaining power, and</td>
<td>351–2</td>
</tr>
<tr>
<td>unfair prices</td>
<td>352</td>
</tr>
<tr>
<td>uniformity, costs of 340–41</td>
<td></td>
</tr>
<tr>
<td>uninsurable losses, and</td>
<td>367</td>
</tr>
<tr>
<td>in US</td>
<td></td>
</tr>
<tr>
<td>antitrust exemptions</td>
<td>323–5</td>
</tr>
<tr>
<td>cartelization</td>
<td>323–4</td>
</tr>
<tr>
<td>Federal Charter proposals</td>
<td>325–6</td>
</tr>
<tr>
<td>financial crisis influences</td>
<td>326–7</td>
</tr>
<tr>
<td>historical development</td>
<td>322–8</td>
</tr>
<tr>
<td>insurance company bankruptcies in 1980s</td>
<td>325</td>
</tr>
<tr>
<td>Oversight and Investigations Committee</td>
<td>325</td>
</tr>
<tr>
<td>reinsurance</td>
<td></td>
</tr>
<tr>
<td>catastrophe insurance</td>
<td>5, 166–7</td>
</tr>
<tr>
<td>covered agreements</td>
<td>245</td>
</tr>
<tr>
<td>residential-mortgage-backed securities (RMBS)</td>
<td>172–3</td>
</tr>
<tr>
<td>Reuter, J.</td>
<td>49–50</td>
</tr>
<tr>
<td>right to defend</td>
<td>439–40, 446–7, 450–51</td>
</tr>
<tr>
<td>limitations</td>
<td>452–3</td>
</tr>
<tr>
<td>policyholder right</td>
<td>474–5, 479</td>
</tr>
<tr>
<td>policy types</td>
<td>441</td>
</tr>
<tr>
<td>risk</td>
<td></td>
</tr>
<tr>
<td>misperception of 17, 109–10</td>
<td></td>
</tr>
<tr>
<td>mitigation</td>
<td>24</td>
</tr>
<tr>
<td>risk aversion</td>
<td></td>
</tr>
<tr>
<td>bad faith liability dispute resolution</td>
<td>427–428</td>
</tr>
<tr>
<td>maximin principle, and</td>
<td>108</td>
</tr>
<tr>
<td>risk classification</td>
<td>see classification risk</td>
</tr>
<tr>
<td>risk management</td>
<td></td>
</tr>
<tr>
<td>enterprise risk management (ERM) practices</td>
<td>266</td>
</tr>
<tr>
<td>Román, S.</td>
<td>51</td>
</tr>
<tr>
<td>Romney, M.</td>
<td>154</td>
</tr>
<tr>
<td>Rothschild, M.</td>
<td>313–16</td>
</tr>
<tr>
<td>Rubin, P.</td>
<td>509</td>
</tr>
<tr>
<td>Russell, T.</td>
<td>160–61, 165, 187</td>
</tr>
<tr>
<td>Safeco Ins. Co. of America v. Hirschmann</td>
<td>386</td>
</tr>
<tr>
<td>safety first model</td>
<td>22</td>
</tr>
<tr>
<td>Salop, S.</td>
<td>427–8, 430</td>
</tr>
<tr>
<td>Savage, L.</td>
<td>82</td>
</tr>
<tr>
<td>Schacht, J.</td>
<td>344–5</td>
</tr>
<tr>
<td>Schlesinger, H.</td>
<td>104–6</td>
</tr>
<tr>
<td>Schwarctz, V.</td>
<td>471, 476–7</td>
</tr>
<tr>
<td>Schwartz, D.</td>
<td>46, 344, 415, 435</td>
</tr>
<tr>
<td>Schwartz, G.</td>
<td>512</td>
</tr>
<tr>
<td>Schwartz v. Liberty Mutual Insurance Co.</td>
<td>474–5</td>
</tr>
<tr>
<td>Seffert v. Los Angeles Transit Lines</td>
<td>118</td>
</tr>
<tr>
<td>selective attrition</td>
<td>311–12</td>
</tr>
<tr>
<td>Sentry Ins. v. US Fidelity &amp; Guaranty Co.</td>
<td>479–80</td>
</tr>
<tr>
<td>settlement of claims</td>
<td>see also duty to settle</td>
</tr>
<tr>
<td>collective-action conflicts</td>
<td>462, 464–6, 480, 482, 484–6</td>
</tr>
<tr>
<td>conflict of interests</td>
<td>461–2</td>
</tr>
<tr>
<td>disregard-the-limits rule</td>
<td>462</td>
</tr>
<tr>
<td>duty to contribute</td>
<td>463, 475, 477–9</td>
</tr>
<tr>
<td>litigation expenses coverage</td>
<td>466</td>
</tr>
<tr>
<td>Michigan rule</td>
<td>471, 476</td>
</tr>
<tr>
<td>no-liability approach</td>
<td>477–8, 480</td>
</tr>
<tr>
<td>overpayment hazard</td>
<td>461–2, 468–70, 472–7, 479</td>
</tr>
<tr>
<td>policyholder incentives</td>
<td>476–7</td>
</tr>
<tr>
<td>policy influences on</td>
<td>465–6</td>
</tr>
<tr>
<td>policy limits, and</td>
<td>465</td>
</tr>
<tr>
<td>post-judgment context</td>
<td>463</td>
</tr>
<tr>
<td>post-settlement context</td>
<td>463</td>
</tr>
<tr>
<td>reasonable consent provision</td>
<td>479</td>
</tr>
<tr>
<td>reasonableness standard</td>
<td>462, 469–70, 472, 479, 482</td>
</tr>
<tr>
<td>segmented approach to</td>
<td>462–4, 481–5</td>
</tr>
<tr>
<td>settlement decision control, assignment of</td>
<td>466</td>
</tr>
<tr>
<td>settlement-duty scenarios</td>
<td>462–4</td>
</tr>
<tr>
<td>above-limit demand, post-judgment context</td>
<td>475–8</td>
</tr>
<tr>
<td>above-limit demand, post-settlement context</td>
<td>478–81</td>
</tr>
<tr>
<td>within-limit demand, post-judgment context</td>
<td>467–73</td>
</tr>
</tbody>
</table>
Social insurance

- adverse selection, and 135
- compulsory participation 131
- conceptions of 133–8
- cost estimates 127
- definitions 4, 127–8, 133–8, 154
- distributional studies 143
- entitlement, and 153–4
- functions 128–38
- insurance vs. tax-and-transfer scheme 127–8, 137–9, 151–6
- justification for 17, 127–8, 130–31, 144–5
- lifetime perspectives 138–45
- motoring insurance, and 147–8
- policy trends 127
- political influences on 153–7
- program features 131–3
- progressive benefits and taxes 137, 151–5
- proportion of GDP 4, 127
- risk spreading and redistribution 128–33, 137–45, 151–3
- role of 127–8, 130–31
- social mobility, and 156–7
- state role in 131–3, 138, 155–6
- subsidies 132–3
- as tax-funded welfare program 154–5
- underwriting constraints 131–2
- veil of ignorance, and 107–8, 151–3
- vs. private insurance 145–9, 153–5
- vs. public assistance programs 149–51, 155

Workers’ Compensation insurance, and 146–7

Social security insurance

- compulsory features 131–2
- conceptions of 134
- Congress funding limits 150
- definitions 134, 137
- lifetime perspectives 139–45
- proportion of wage 149
- subsidies 132–3
- Solvency II 255–7, 268–71, 276–7, 284
- Solvency Modernization Initiative 253–5, 266–7, 274–6
- solvency regulation
- Authorized Control Level (ACL) 262–4
- capital requirements 260–62
- EU approaches 268–71
- international approaches 271–3
- optimal capital standards 273–4
- US approaches 262–8
- consumer protection, and 247
- corporate governance
- EU approaches 276–7
- international approaches 277–8
- US approaches 274–6
- covered agreements 245
- economic theories of 242–9
- economic trend influences 249–53
- efficiency of 242–4
- enterprise risk management (ERM) practices 266
- equivalence arrangements 256–7
- EU reforms
- corporate governance 276–7
- group supervision 283–4
- Omnibus II Directive 253, 256
- Solvency II 255–7, 268–71, 284
- US reforms, differences from 284–6
- functions 241–4
- globalization, and 252–3
- global systemically important insurers (G-SIIs) 273
- group supervision
- EU approaches 283–4
- international approaches 285
- US approaches 245, 279–83
- historical developments 323
- industry influences over 247–9
- insolvency guarantees 244
- international regulatory standards 257–8
- capital requirements 271–3
corporate governance 277–8
market failures, and 242–3
minimum capital requirement (MCR) 269–70
model-based vs. formula-based approaches 265–8
negative externalities, and 243–4
optimal regulation, goal of 244
Own Risk and Solvency Assessment (ORSA) 275–7
political economy of 244–9
principles of 242–4
risk-based capital (RBC) formula 262–8
risk-based global insurance capital standard 272
safety incentives, and 243–4
Solvency II 255–7, 268–71, 276–7, 284
Solvency Modernization Initiative 253–5, 266–7, 274–6
solvency ratios, benefits of 273–4
systemically important financial institutions (SIFIs) 252, 281–2
target capital (SCR) 269–70
technical nature of 247–8
Total Adjusted Capital (TAC) 263
US reforms
capital requirements 262–8
choice of regulator 245–6
corporate governance 274–6
Dodd-Frank Act 245–6, 280–83, 286, 358
EU reforms, differences from 284–6
Federal controls 244–5, 280
Federal Reserve supervision 246, 280–83
group supervision 245, 279–83
Sommers, B. 198, 222
Southeastern Underwriters 352
special relationship, definition 57
Squire, R. 484–5
state role 4, 244–5
affordability, and 28–9
annuities and life insurance 29–30
catastrophe insurance 5, 164–5, 174–86
consumer guidance 28–9
efficiency, and 329–30
fiscal federalism, theory of 328–34
influences on 28, 148
insurance contracts 402
inter-state policy variations and limits 331–4
public good vs. social harm 28
risk mitigation challenges for individual 28–9
in social insurance 131–3, 138
under-purchase intervention 28
vs. federal role 244–5, 321–2, 369–70
barriers to entry 349–51
claim settlement practices, and 368
commercial insurance 365–6
commodity products 365
contract term requirements, and 368
economies of scale 348–9
externalities, influences of 353–63
extraterritorial regulation 354–5
federal control, benefits 329–31, 340–41, 364–7
financial contagion 335, 356–8
fiscal federalism, theory of 328–34
fraud, and 346–7
historical development 322–8
insurer contagion 358–60
international considerations 366–7
judicial rulings, and 361–2
large or catastrophic losses 360–61
market failure causes and responses 336–41
market power regulation 348–53
moral hazard, and 343–6
price regulation, and 369
price variability and switching costs 344–4
solvency and resolution activities 364
state control, benefits 331–4, 340–41, 367–9
uncompensated accidents 353–4
unequal bargaining power, and 351–2
unfair prices regulation 352
uniformity, costs of 340–41
uninsurable losses, and 367
Stempel, C. 418–19
Stigler, G. 247
Stiglitz, J. 313–16, 444
Stockley, K. 222
Stoler, A. 298
strict liability
  duty to settle, and 462–4, 469–74, 476–80
  vs. negligence 492–9
subprime mortgages 172–3
supply and demand
  first-party pain and suffering
  insurance 110–11
  income effects 81–2
  price elasticity, and 294
Sykes, A. 425, 430
systemically important financial institutions (SIFIs) 252, 281–2, 358
systemic risk
  financial contagion 335, 356–8
Syverud, K. 505
technology
  advice bias, and 36, 63–6
  comparison sites 63–4
  insurance intermediaries, implications for 36, 63–6
  risks from 36, 65–6
Tennyson, S. 417–20, 425, 427, 431–2, 434, 504
terrorism
  aggregate losses 160
terror insurance
  9/11 attacks, influences on cover availability 22
  insurer behavior 21–2
  safety first model 22
  state vs. federal regulation 367
Terrorism Risk Insurance Act (TRIA) 179–80, 367
tort law
  see also bad faith liability; liability insurance; pain and suffering; product liability law
  as alternative to first-party insurance 98–9, 489, 508–11
  barriers in 97–8
  complementarity with other areas 97
  costs of 112–17
  deterrence vs. over-deterrence 96–8
  efficiency principle 94, 104–5, 508–9
  function 96, 98–9, 114–15, 488–9
  insurance paradigm, and 98–9
  market reputation, and 97
  product liability 97–9
  reform trends 94
  regulation, and 97
  workers’ compensation, and 489
transparency, principles of 25
Troubled Asset Recovery Program (TARP) 357–8
Tversky, A. 20, 78
Tyco International 457–8
underprotection
  annuities 29
  life insurance 29–30
  reasons for 130
  trends 38
undersettlement hazard 461–2, 468–70, 476–7
unemployment insurance
  compulsory features 131–2
  lifetime perspectives 139–45
  public assistance, and 149–51
  subsidies 132
unfair trade practices
  insurance intermediaries, and 61–3
Unfair Trade Practices Model Act (2008) 413
uninsured motorist insurance 111, 147–8
United Kingdom
  bad faith liability 415–16, 420
  flood risk insurance 177
Unum/Provident 421
utility
  definition 71–2
  expected utility theory 106–10
  marginal utility of wealth 99–104
value-based insurance design 90
Varian, H. 152
veil of ignorance
  classification risk, and 299–300
  social insurance, and 107–8, 151–3
Viscusi, K. 513
<table>
<thead>
<tr>
<th>Term</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Warfel, J.</td>
<td>417–20</td>
</tr>
<tr>
<td>warranties</td>
<td>31</td>
</tr>
<tr>
<td>wealth</td>
<td></td>
</tr>
<tr>
<td>marginal utility</td>
<td>99–104</td>
</tr>
<tr>
<td>White, L.</td>
<td>427–8, 430</td>
</tr>
<tr>
<td>Wickelgren, A.</td>
<td>510</td>
</tr>
<tr>
<td>Wilder, J.</td>
<td>56</td>
</tr>
<tr>
<td>Workers’ Compensation insurance</td>
<td>146–7, 489, 506</td>
</tr>
<tr>
<td>Wright, R.</td>
<td>507–8</td>
</tr>
<tr>
<td>Yelen, S.</td>
<td>350–51</td>
</tr>
<tr>
<td>Yoon, A.</td>
<td>513</td>
</tr>
<tr>
<td>Zahorsky, R.</td>
<td>457</td>
</tr>
<tr>
<td>Zapata, D.</td>
<td>222</td>
</tr>
<tr>
<td>Zeiler, K.</td>
<td>449</td>
</tr>
<tr>
<td>Zipursky, B.</td>
<td>102</td>
</tr>
<tr>
<td>Zweifel, P.</td>
<td>138</td>
</tr>
</tbody>
</table>